

ABSTRACT

[0079] The present invention provides a process for manufacturing a cross-linked expanded safety support having a cellular structure comprising closed cells. The process involves kneading by thermomechanical working a rubber composition comprising a diene elastomer having a molar ratio of diene units (defined as units resulting from dienes) of less than 15%, water in an amount of from 3 to 6 phr (phr = parts by weight per 100 parts elastomer), a blowing agent, such as azobisformamide, that provides for formation of the cellular structure and a vulcanization system. The rubber composition so prepared is then formed, e.g. by injection or extrusion, into cross-linkable blank, which is then cured in a mold and then demolded. The demolded blank is then expanded by decomposition of the blowing agent and vulcanized to produce the cross-linked expanded elastomeric support.